

Figure 1

α IFN-2	-	+	+	+	+	+	+	+	+	+	+	+	+
mAb	-	-	-	-	-	-	-	-	-	-	-	-	-
(μg/ml)			1	1	1	1	1	1	1	1	1	1	1
			IgG	9F3	3B7	3B7	1D3	1D3	1D3	1F3	1F3	1F3	1F3



IOSF -

Figure 2

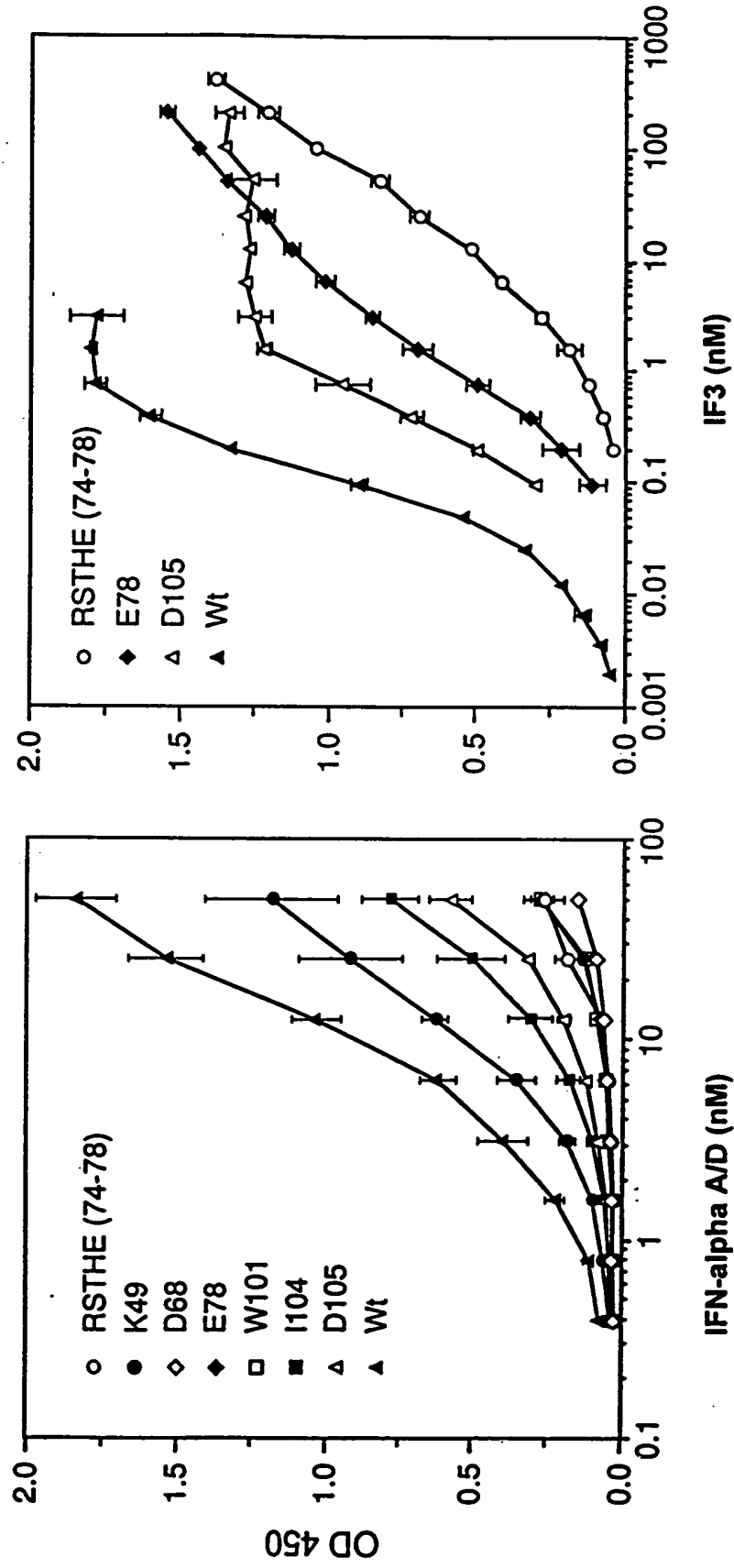


Figure 3A

Figure 3B

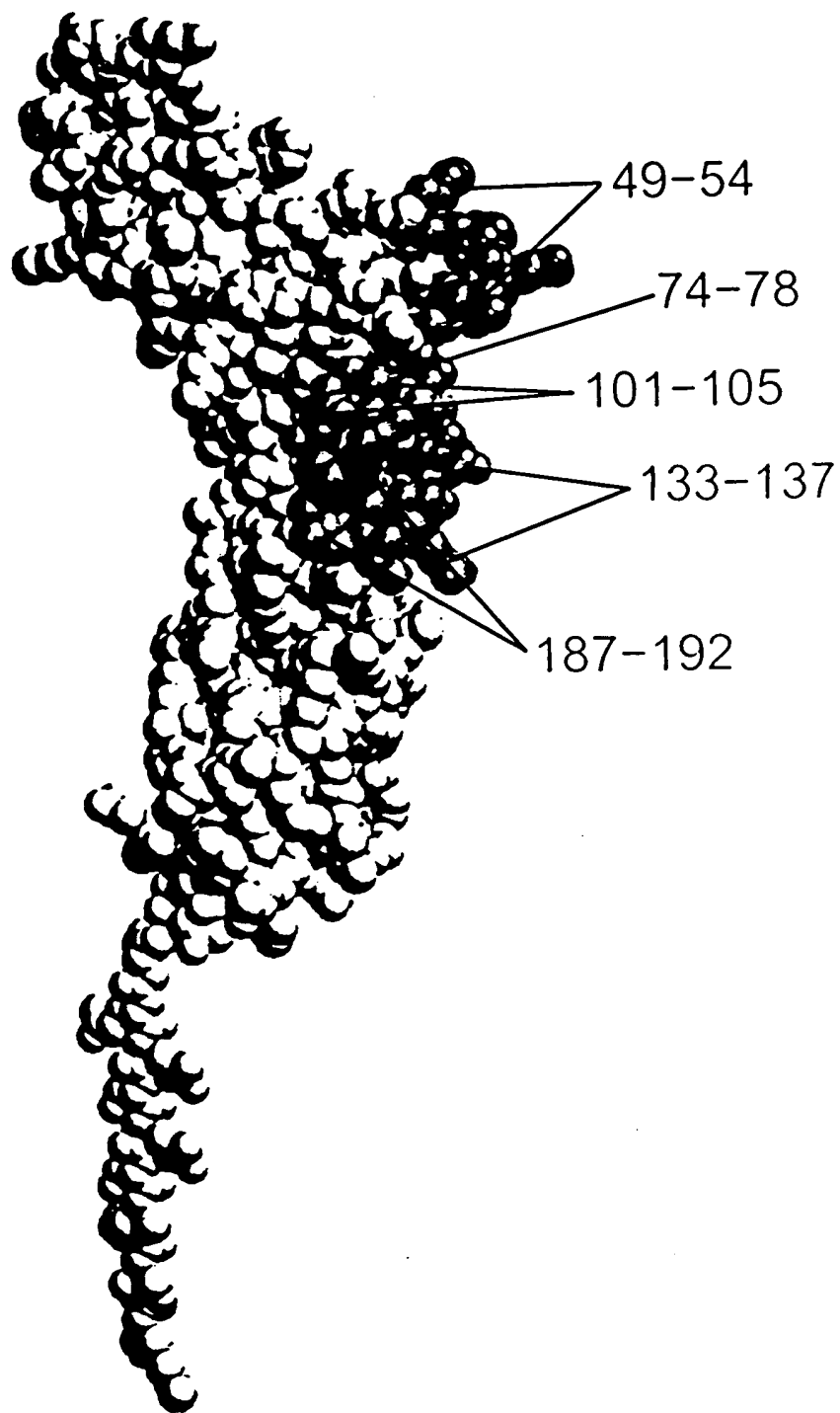


Figure 4

1 GAATTCCTAA AATAGCAAA GATGCTTTG AGCCAGATG CCTTCATCGT CAGATCACTT AATTGGTTC TCATGGTGA TATCAGCCTC GTGTTTGGTA
CTTAAGGATT TTTATCGTTT CTACGAAAC TCGGTCTTAC GGAAGTAGCA GTCTAGTGAA TTAACCAAG AGTACCACAT ATAGTCGGAG CACAAACCAT
Ile

human alpha beta receptor

101 TTTTCATATGA TTGCGCTGAT TACACAGATG AATCTTGCAC TTTCAGATA TCATTGGGA ATTTCGGTC CATCTTATCA TGGGAATTAA AAAACCACTC
AAAGTATACT AAGCGGACTA ATGTGTCTAC TTAGAAGCTG AAGTTCTAT AGTAACGCTT TAAAGGCCAG GTAGAATAGT ACCCTTAATT TTTTGGTGAG

2 8 rTyas pserProasp TyrThrAspG luserCysTh rPheLysIle SerLeuArgA snPheArgSe rIleLeuSer TrpGluleul ysAsnHisSer

201 CATTGTACCA ACTCACTATA CATTGCTGTA TACAATCATG AGTAAACCAG AAGATTGGAA GGTGGTTAAG AACTGTGCAA ATACCACAAG ATCATTTTGT
GTAACATGGT TGAGTGATAT GTAACGACAT ATGTTAGTAC TCATTGGTC TTCTAAACTT CCACCAATTC TTGACACGTT TATGGTGTTC TAGTAAACA
35 IleValPro ThrHisTyrT hrLeuLeuTy rThrIleMet SerLysProG luaspLeuLy sValVallys AsnCysAlaa snThrThrAr gserPheCys

301 GACCTCACAG ATGAGTGGAG AAGCACACAC GAGGCCTATG TCACCGTCCT AGAAGGATTC AGCGGGAACA CAACGTTGTT CAGTTGCTCA CACAATTTCT
CTGGAGTGC TACTCACCTC TTCGTGTGTG CTCCGGATAC AGTGGCAGGA TCTTCCTAAG TCGCCCTTGT GTTGCAACAA GTCAACGAGT GTGTTAAAGA

68 AspLeuThra spGlutPar gserThrHis GlualaTyrV alThrValle uGluglyPhe serGlyAsnT hrThrLeuph eserCysSer HisAsnPheTrp

401 GGCTGGCCAT AGACATGTCT TTTGAACCAC CAGAGTTTGA GATTGTTGGT TTTACCAACC ACATTAATGT GATGGTGAAA TTTCCATCTA TTGTTGAGGA
CCGACCGGTA TCTGTACAGA AAACCTGGTG GTCTCAAACT CTACCAACCA AAATGGTTGG TGTAAATTACA CTACCACCTT AAAGGTAGAT AACAACTCCT

102 LeuAlaIl easpMetSer PheGlupProp roglupheGl uIleValgly PheThrAsnH isIleAsnVa lMetVallys PheProSerI leValGluglu

501 AGAATTACAG TTTGATTTAT CTCTCGTCAT TGAAGAACAG TCAGAGGGAA TTGTTAAGAA GCATAAACCC GAAATAAAG GAAACATGAG TGGAAATTTTC
TCTTAATGTC AAACCTAAATA GAGAGCAGTA ACTTCTGTGTC AGTCTCCCTT AACAAATCTT CGTATTTGGG CTTTATTTTC CTTTGTACTC ACCTTTAAAG

135 GluLeuGln PheAspLeus erLeuValIl egluglugin SerGluglyI leVallysLy sHisLysPro GluileLysG lyAsnMetSe rGlyAsnPhe

601 ACCTATATCA TTGACAAGTT AATTCCAAAC ACGAACTACT GTGTATCTGT TTATTTAGAG CACAGTGATG AGCAAGCAGT AATAAAGTCT CCCTTAAAT
TGGATATAGT AACTGTTTCAA TTAAGGTTTG TGCTTGATGA CACATAGACA AATAAATCTC GTGTCACTAC TCGTTCGTCA TTATTTTACA GGGAAATTTTA

168 ThrTyrIleI leaspLysLe uIleProasn ThrAsnTyrC ysValSerVa lTyrLeuglu HisSerAspG luGlnAlaVa lIleLysSer ProLeulysCys

701 GCACCCCTCT TCCACCTGGC CAGGAATCAG AATCAGCAGA ATCTGCCGAC AAAACTCACA CATGCCCACC GTGCCAGCA CCTGAACCTC TGGGGGACC
CGTGGGAGGA AGGTGGACCG GTCCTTAGTC TTAGTCGTCT TAGACGGCTG TTTTGAGTGT GTACGGGTGG CACGGGTGGT GGAATTGAGG ACCCCCTGG

202 ThrLeuLe uProProgly GlnGluserG luserAlaGl userAlaasp LysThrHisT hrCysProPr oCysProAla ProGluleul euglyGlyPro
IgG1

801 GTCAGTCTTC CTCTTCCCC CAAAACCCAA GGACACCCCTC ATGATCTCCC GGACCCCTGA GGTCAATGC GTGGTGTGG ACGTGAGCCA CGAAGACCTT
CAGTCAGAAG GAGAAGGGGG GTTTTGGGT CCGTGGGAG TACTAGAGGG CCTGGGACT CCAGTGTAAC CACCACCACC TGCACTCGGT GCTTCTGGGA

235 SerValPhe LeuPheProp roLysProLy sAspThrLeu MetIleSera rgThrProGl uValThrCys ValValVala spValSerHI sGluaspPro

Figure 5A

901 GAGGTCAAGT TCAACTGGTA CGTGACGGC GTGGAGTGC ATATGGCAA GACAAAGCCG CGGAGGAGC AGTACAACAG CACGTACCGA GTGGTCAGCG
 CTCCAGTTCA AGTTGACCAT GCACCTGCC CACCTCCACG TATTACGGT CTGTTTCGGC GGCCTCCTCG TCATGTTGTC GTGCATGGCT CACCATGGCG
 268 GluValLysP heAsnTrpTy rValaspGly ValGluValH isAsnAlaLy sThrLysPro ArgGluGluG InTyraNse rThrTyraN ValValserVal
 1001 TCCTCACCGT CCTGCACCAG GACTGGCTGA ATGGCAAGGA GTACAAGTGC AAGGTCTCCA ACAAGCCCT CCCAGCCCC ATCGAGAAAA CCATCTCCAA
 AGGAGTGGCA GGACGTGGTC CTGACCGACT TACCGTTCCT CATGTTCCAG TTTCCAGAGGT TGTTCGGGA GGTTCGGGG TAGCTCTTTT GGTAGAGGTT
 302 LeuThrVa lLeuHisGln AspTrpLeuA snGlyLysG1 uTyrlsCys LysValserA snLysAlaLe uProAlaPro lIleGluLysT hrIleSerLys
 1101 AGCCAAAGGG CAGCCCGAG AACACAGGT GTACACCCTG CCCCACCTCC GGAAGAGAT GACCAAGAAC CAGGTCAGCC TGACCTGCCT GGTCAAAGGC
 TCGGTTTCCC GTCGGGGCTC TTGGTGTCCA CATGTGGGAC GGGGTAGG CCCTTCTCTA CTGGTTCTTG GTCCAGTCGG ACTGGACGGA CCAGTTTCCG
 335 AlaLysGly GlnProArg lProGlnVa lTyThrLeu ProProSera rgGluGluMe tThrLysAsn GlnValserL euThrCysLe uValLysGly
 1201 TTCTATCCCA GCGACATCGC CGTGGAGTGG GAGAGCAATG GGCAGCCGGA GAACAACCTAC AAGACCACGC CTCCCGTGCT GGACTCCGAC GGCTCCTTCT
 AAGATAGGGT CGCTGTAGCG GCACCTCACC CTCTCGTTAC CCGTCGGCCT CTGTGTGATG TTCTGGTGCG GAGGGCACGA CCTGAGGCTG CCGAGGAAGA
 368 PheTyrProS erAspIleAl aValGluTrp GluSerAsnG lyGlnProG1 uAsnAsnTy rLysThrThrp roProValle uAspSerAsp GlySerPhePhe
 1301 TCCTCTACAG CAAGCTCACC GTGGACAAGA GCAGGTGGCA GCAGGGGAAC GTCTTCTCAT GCTCCGTGAT GCATGAGGCT CTGCACAACC ACTACACGCA
 AGGAGATGTC GTTCGAGTGG CACCTGTTCT CGTCCACCGT CGTCCCTTG CAGAAGAGTA CGAGGCACTA CGTACTCCGA GACGTGTTGG TGATGTGCGT
 402 LeuTy rSe rLysLeuThr ValaspLysS erArgTrpG1 nGlnGlyAsn ValPheSerC ysSerValMe tHisGluAla LeuHisAsnH isTyThrGln
 1401 GAAGAGCCTC TCCCTGTCTC CGGGTAAATG AGTGCAGCG CCCTAGAGTC GACCTGCAGA AGCTTAGAAC CGAGGGGCGG CCATGGCCCCA ACTTGTATTAT
 CTCTCGGAG AGGACAGAG GCCCATTTAC TCACGCTGCC GGGATCTCAG CTGGACGCTT TCGAATCTTG GCTCCCCGGC GGTACCGGGT TGAACAAATA
 435 LysSerLeu SerLeuSerP rogLyLysOP * (SEQ ID NO.26) sv40 early
 poly A
 1501 TGCAGCTTAT AATGGTTACA AATAAAGCAA TAGCATCACA AATTTCACAA ATAAAGCATT TTTTCACTG CATTTAGTT GTGGTTTGT CAAACTCATC
 ACGTCGAATA TTACCAATGT TTATTTCTGT ATCGTAGTGT TTAAGTGT TATTCTGTAA AAAAAGTGAC GTAAGATCAA CACCAAAACAG GTTTGAGTAG
 1601 AATGTATCTT ATCATGTCTG GATCGATCG GAATTAATTC GCGCAGCAC CATGGCCTGA AATAACCTCT GAAAGAGGAA CTTCGTTAGG TACCTTCTGA
 TTACATAGAA TAGTACAGAC CTAGCTAGCC CTTAATTAAG CCGCGTCGTG GTACCGGACT TTATTGGAGA CTTTCTCTT GAACCAATCC ATGGAAGACT
 sv40 origin
 1701 GCGGGAAGA ACCAGTGTG GAATGTGTGT CAGTTAGGGT GTGGAAGTC CCCAGGCTCC CCAGCAGGCA GAAGTATGCA AAGCATGCAT CTCATATTAGT
 CCGCCTTCT TGGTCGACAC CTTACACACA GTCAATCCCA CACCTTTCAG GGTCGCGAGG GGTCTCCGT CTTTCATACGT TTCGTACGTA GAGTTAATCA
 1801 CAGCAACCAG GTGTGGAAG TCCCCAGGCT CCCCAGCAGG CAGAAGTATG CAAAGCATGC ATCTCAATTA GTCAGCAACC ATAGTCCCCG CCCTAATCTC
 GTCGTTGGTC CACACCTTTC AGGGGTCCGA GGGGTCTGCC GTCTTCATAC GTTTCGTACG TAGAGTTAAT CAGTCGTTGG TATCAGGGCG GGGATTGAGG

Figure 5B

1901 GCCCATCCCG CCCCTAATC CGCCAGTTC CGCCGATCT CGGCCCATG GCTGACTAAAT TTTTTTAAT TATGCAGAG CCGAGGCCGC CTCGGCCTCT
CGGGTAGGGC GGGGATTGAG CGGGTCAAG GCGGGTAAGA GCGGGGTAC CGACTGATTA AAAAAATAA ATACGTCTCC GGCTCCGGCG GAGCCGGAGA
2001 GAGCTATTCC AGAAGTAGTG AGGAGGCTTT TTTGGAGGCC TAGGCTTTTG CAAAAAGCTG TTAACAGCTT GGCACCTGGCC GTCGTTTTTAC AACGTCGTGA
CTCGATAAGG TCTTCATCAC TCCTCCGAAA AAACCTCCGG ATCCGNAAC GTTTTTCGAC AATTGTGAA CCGTGACCAG CAGCAAAATG TTGCAGCACT
start pUC118
2101 CTGGGAAAAC CCTGGCGTTA CCCAACTTAA TCGCCTTGCA GCACATCCCC CTTTCGCCAG CTGGCGTAAT AGCGAAGAGG CCCGCACCGA TCGCCCTTCC
GACCCCTTTTG GACCCGCAAT GGGTTGAAT AGCGGAACGT CGTGTAGGG GGAAGCGGTC GACCGCATTA TCGCTTCTCC GGGCGTGGCT AGCGGGAAGG
2201 CAACAGTTGC GTAGCCTGAA TGGCGAATGG CGCCTGATGC GGTATTTTCT CTTACGCAT CTGTGCGGTA TTTACACACG CATACGTCAA AGCAACCATTA
GTTGTCAACG CATCGGACTT ACCGCTTACC GCGGACTACG CCATAAAAGA GGAATGCGTA GACACGCCAT AAAGTGTGGC GTATGCAGTT TCGTTGGTAT
2301 GTACGCGCCC TGTAGCGCG CATTAAGCGC GCGGGGTGTG GTGGTTACGC GCAGCGTGAC CGCTACACTT GCCAGCGCCC TAGCGCCCGC TCCTTTTCGCT
CATGCGCGG ACATCGCCGC GTAAATCGCG CCGCCACAC CACCAATGCG CGTCGCACTG CGGATGTGAA CGGTGCGGG ATCGCGGGCG AGGAAAGCGA
2401 TTCTTCCCTT CCTTCTCGC CAGTTTCGCC GGTTCCTCCC GTCAAGCTCT AAATCGGGG CTCCCTTTAG GGTTCGATT TAGTGCTTTA CGGCACCTCG
AAGAAGGGA GGAAGAGCG GTGCAAGCG CCGAAAGGG CAGTTCGAGA TTAGCCCCC GAGGGAATC CCAAGGCTAA ATCACGAAAT GCCGTGGAGC
2501 ACCCCAAAA ACTTGATTG GGTGATGGT CAGGTAGTG GCCATCGCCC TGATAGACGG TTTTTCGCCC TTTGACGTTG GAGTCCACGT TCTTTAATAG
ACCTGAGAAC AAGTTTGAC CTGTGTGTA CAACCTATC TCGGGCTATT CTTTGTATT ATAAGGGATT TTGCCGATT TTGCCGATAA GCCGATAAC CAATTTTTTA
2601 GAGCTGATTT AACAAAAAT TAACGCGAAT TTTAACAAAA TATTAACGTT TACAATTTTA TGGTGCACTC TCAGTACAAT CTGCTCTGAT GCCGCATAGT
CTCGACTAAA TTGTTTTTAA ATTGCGCTTA AATTTGTTTT ATAATTGCAA ATGTTAAAAAT ACCACGTGAG AGTCATGTTA GACGAGACTA CGGCGTATCA
2801 TAAGCCAACT CCGCTATCGC TACGTGACTG GGTCAATGGCT GCGCCCCGAC ACCCGCTGAC GCGCCCTGAC GGGCTTGTCT GCTCCCCGCA
ATTGCGTTGA GCGGATAGCG ATGCACTGAC CCAGTACCAG CCGGGGCTG TGGGCGACTG CCGGGGACTG CCCGAACAGA CGAGGGCCGT
2901 TCCGCTTACA GACAAGCTGT GACCGTCTCC GGGAGCTGCA TGTGTACAG GTTTTCACCG TCATCACCGA AACGCGCGAG GCAGTATTCT TGAAGACGAA
AGGCGAATGT CTGTTTCGACA CTGGCAGAGG CCCTCGACGT ACACAGTCTC CAAAAGTGGC AGTAGTGGCT TTGCGCGCTC CGTCATAAGA ACTTCTGCTT
3001 AGGGCCTCGT GATACGCCTA TTTTATAGG TTAATGTCT GATAATAATG GTTTCCTAGA CGTCAGGTGG CACTTTTCGG GGAATGTGC GCGGAACCCC
TCCCGAGCA CTATGCGGAT AAAAATATCC AATTACAGTA CTATTATTAC CAAAGATCT GCAGTCCACC GTGAAAAAGCC CTTTACACG CGCCTTGGGG

Figure 5C

3101 TATTGTGTTA TTTTCTCTAAA TACATTCTAAA TATGTATCCG CTGATGAGAC AATAACCCCTG ATAAATGCTT CAATAATATT GAAAAAGGAA GAGTATGAGT
ATAAACAAAT AAAAAGATT ATGTAAGTTT ATACATAGGC GAGTACTCIG TTATTGGGAC TATTACGAA GTTATTATAA CTTTTTCCIT CTCATACTCA
3201 ATTCAACATT TCCGTGTCGC CCTTATTCCC TTTTTTGGG CATTTTGCCT TCCTGTTTTT GCTCACCCCG AAACGCTGGT GAAAGTAAAA GATGCTGAAG
TAAGTTGTAA AGGCACAGCG GGAATAAGG AAAAAACGCC GTAAACGGA AGGACAAAA CGAGTGGGTC TTTGCGACCA CTTTCAITTT CTACGACTTC
3301 ATCAGTTGGG TGCACGAGTG GGTACATCG AACTGGATCT CAACAGCGGT AAGATCCTTG AGAGTTTTCG CCCCAGAAAG CGTTTTCCAA TGATGAGCAC
TAGTCAACCC ACGTGCTCAC CCAATGTAGC TTGACCTAGA GTTGTGCCA TTCTAGGAAC TCTCAAAAGC GGGGCTTCTT GCAAAAGGTT ACTACTCGTG
3401 TTTTAAAGTT CTGCTATGTG GCGCGTATT ATCCCGTGAT GACGCCGGG AAGAGCAACT CGGTGCGCG ATACACTATT CTCAGAAATGA CTTGGTTGAG
AAAATTTCAA GACGATACAC CGGCCATAA TAGGGCACTA CTGGGGCCG TTCTCGTTGA GCCAGCGCG TATGTGATAA GAGTCTTACT GAACCAACTC
3501 TACTCACCCAG TCACAGAAAA GCATCTTACG GATGGCATGA CAGTAAGAGA ATTATGCAGT GCTGCCATAA CCATGAGTGA TAAACACTGG GCCAACTTAC
ATGAGTGGTC AGTGTCTTTT CGTAGAATGC CTACCGTACT GTCAATCTCT TAATACGTCA CGACGGTATT GGTACTCACT ATTGTGACGC CGGTTGAATG
3601 TTCTGACAAAC GATCGGAGGA CCGAAGGAGC TAACCGCTTT TTTGCACAAC ATGGGGGATC ATGTAACCTG CCTTGATCGT TGGGAACCGG AGCTGAATGA
AAGACTGTTG CTAGCCTCCT GGCTTCTCTG ATTGGCGAAA AAACGTGTTG TACCCCTAG TACATTGAGC GGAACCTAGCA ACCCTTGGCC TCGACTTACT
3701 AGCCATACCA AACGACGAGC GTGACACCAC GATGCCAGCA GCAATGGCAA CAACGTTGCG CAAACTATTA ACTGGCGAAC TACTTACTCT AGCTTCCCGG
TCGGTATGGT TTGCTGCTCG CACTGTGCTG CACTGTGCTG CTACGGTCTG GTTGCAACGC GTTTGATAAT TGACCGCTTG ATGAATGAGA TCGAAGGGCC
3801 CAACAAATTA TAGACTGGAT GGAGGCGGAT AAAGTTGCAG GACCCTTCT GCGCTCGGC CTTCCGGGCTG GCTGGTTTAT TGCTGATATA TCTGGAGCCG
GTTGTTAATT ATCTGACCTA CCTCCGCCTA TTTCAACGTC CTGGTGAAGA CGCAGGCCG GAAGGCCGAC CGACCAATA ACGACTAITT AGACCTCGGC
3901 GTGAGCGTGG GTCTCGCGGT ATCATTTGCAG CACTGGGGCC AGATGGTAAG CCTCCCGTA TCGTAGTTAT CTACACGACG GGGAGTCAGG CAACTATGGA
CACTCGCACC CAGAGCGCCA TAGTAACGTC GTGACCCCGG TCTACCATTG GGGAGGGCAT AGCATCAATA GATGTGCTGC CCTCAGTCC GTTGATACCT
4001 TGAACGAAAT AGACAGATCG CTGAGATAGG TGCCTCACTG ATTAAGCATT GGTAACGTGC AGACCAAGTT TACTCATATA TACTTTAGAT TGATTTAAAA
ACTTGCTTTA TCTGTCTAGC GACTCTATCC ACGGAGTGAC TAATTCGTAA CCATTGACAG TCTGGTTCAA ATGAGTATAT ATGAAATCTA ACTAAATTTT
4101 CTTCAITTTT AATTTAAAA GATCTAGGTG AAGATCCTTT TTGATAATCT CATGACCANA ATCCCTTAAC GTGAGTTTTC GTTCCACTGA GCGTCAGACC
GAAGTAAAA TTAATTTTC CTAGATCCAC TTCTAGGAAA AACTATTAGA GTACTGGTTT TAGGGAATTG CACTCAAAAG CAAGGTGACT CGCAGTCTGG
4201 CCGTAGAAAA GATCAAGGA TCTTCTTGAG ATCCTTTTTT TCTGCGCGTA ATCTGCTGCT TGCAACANA AAAACACCG CTACACGCGG TGGTTTGT
GGCATCTTTT CTAGTTTCTT AGAAGAACTC TAGGAAAAA AGACGCGCAT TAGACGACGA ACGTTTGT TTTTGGTGGC GATGGTGGCC ACCAAACAAA
4301 GCCGGATCAA GAGCTACCAA CTCTTTTCC GAAGGTAACCT GGCTTCAGCA GAGCGCAGAT ACCAAATACT GTCCTTCTAG TGTAGCCGTA GTTAGGCCAC
CGGCCTAGTT CTCGATGGTT GAGAAAAAGG CTTCCATTGA CCGAAGTCGT CTCGCGTCTA TGGTTTATGA CAGGAAGATC ACATCGGCAT CAATCCGGTG

Figure 5D

4401 CACTTCAAGA ACTCTGTAGC ACCGCTACA TACCTGGCTC TGCTAATGCT GTTACCAGTG GCTGCTGCCA GTGGCGATAA GTCGTGTCTT ACCGGGTGCG
 GTGAAGTTCT TGAGACATCG TGGCGGATGT ATGGAGCGAG AATGGTCAC CAATGGTCAC CGACGACGGT CACCGCTATT CAGCACAGAA TGGCCCAACC
 4501 ACTCAAGACG ATAGTTACCG GATAAGGCGC AGCGGTGCGG CTGAACGGGG GGTTCGTGCA CACAGCCCCAG CTTCGGAGCGA ACGACCTACA CCGAACTGAG
 TGAGTTCTGC TATCAATGCG CTATTCCGCG TCGCCAGCCC GACTTGCCCC CCAAGCACGT GTGTCGGGTC GAACCTCGCT TGCTGGATGT GGCTTGACTC
 4601 ATACCTACAG CGTGAGCATT GAGAAAGCGC CACGCTTCCC GAAGGGAGAA AGGCGGACAG GTATCCGGTA AGCGGCAGGG TCGGAACAGG AGAGCGCACG
 TATGGATGTC GCACTCGTAA CTCTTTCCGCG GTGCGAAGGG CTTCCTCTTT TCCGCCGTGC CATAGGCCAT TCGCCGTCCC AGCCTGTCC TCTCGCGTGC
 4701 AGGAGCTTC CAGGGGAAA CGCTGGTAT CTTTATAGTC CTGTGCGGTT TCGCCACCTC TGACTTGAGC GTCGATTTT GTGATGCTCG TCAGGGGGG
 TCCCTCGAAG GTCCCCCTTT GCGGACCATA GAAATATCAG GACAGCCCCA AGCGGTGAG ACTGAACCTCG CAGCTAAAAA CACTACGAGC AGTCCCCCCC
 4801 GGAGCCTATG GAAAAAGGCC AGCAACGCGG CTTTTTACG GTTCTTGGCC TTTTGTGCTCA CATGTTCTTT CCTGCGTTAT CCCCTGATTC
 CCTCGGATAC CTTTTTGGG TCGTTGCGC GAAAAAATGC CAAGGACCGG AAAACGAGT GTACAAGAAA GGACGCAATA GGGGACTAAG
 4901 TGTGGATAAC CGPATFACCG CCTTTGAGTG AGCTGATACC GCTCGCCGCA GCCGAACGAC CGAGCGCAGC GAGTCAGTGA GCGAGGAAGC GGAAGAGCGC
 ACACCTATTG GCATAATGCG GGAACATCAC TCGACTATGG CGAGCGGCGT CGGCTTGCTG GCTCGCGTCG CTCAGTCACT CGCTCCTTCG CTTTCTCGCG
 5001 CCAATACGCA AACCGCCTCT CCGCGCGGT TGGCCGATTC ATTAATCCAG CTGGCACGAC AGGTTTCCCG ACTGGAAGC GGGCAGTGAG CGCAAGCGCA
 GGTATATGCGT TTGGCGGAGA GGGCGCGCA ACCGCTAAG TAATTAGTTC GACCGTGCTG TCCAAAGGSC TGACCTTTTCG CCCGTCACTC GCGTTGCGTT
 5101 TTAATGTGAG TTACCTCACT CATTAGGCAC CCCAGGCTTT ACACTTTATG CTTCCGGCTC GTATGTTGTG TGGAAATTGT AGCGGATAAC AATTCACAC
 AATTACACTC AATGGAGTGA GTAAATCCGT GGTCCGAAA TGTGAATAC GAAGGCCGAG CATAACAACAC ACCTTAAACAC TCGCCTATTG TTAAAGTGTG
 5201 AGGAAACAGC TATGACCATG ATTACGAATT AATTCGAGCT CGCCGACAT TGATTATTGA CTAGTTATTA ATAGTAATCA ATTACGGGGT CATTAGTTCA
 TCCTTTGTGC ATACTGGTAC TAATGCTTAA TTAAGCTCGA GCGGCTGTA ACTAATAACT GATCAATAAT TATCAATTAGT TAATGCCCCA GTAATCAAGT
 from pPMLCMV beginning to HindIII, enhancers and promoter
 5301 TAGCCCATAT ATGGAGTTCC GCGTTACATA ACTTACGGTA AATGGCCCGC CTGGCTGACC GCCCAACGAC CCCCCCCCAT TGACGTCAAT AATGACGTAT
 ATCGGGTATA TACCTCAAGG CGCAATGTAT TGAATGCCAT TTACCGGGCG GACCGACTGG CCGGTTGCTG GGGGCGGTA ACTGCAGTTA TTACTGCATA
 5401 GTTCCCATAG TAACGCCAAT AGGGACTTTC CATTGACGTC AATGGGTGGA GTATTTACGG TAAACTGCCC ACATTGGCAGT ACATCAAGTG TATCATATGC
 CAAGGGTATC ATTGCGGTTA TCCCTGAAAG GTAATGTCAG TTACCCACCT CATAAATGCC ATTTGACGGG TGAACCGTCA TGATGTTTAC ATAGTATACG
 5501 CAAGTACGCC CCCTATTGAC GTCAATGACG GTAAATGGCC CGCTGGCAT TATGCCCAGT ACATGACCTT ATGGGACTTT CCTACTTGGC AGTACATCTA
 GTTCATGCGG GGGATAACTG CAGTTACTGC CATTTACCGG GCGGACCGTA ATACGGGTCA TGTACTGGAA TACCCTGAA GGATGAACCG TCATGTAGAT

Figure 5E

5601 CGTATTAGTC ATCGCTATTATA CCATGGTGAT GCGGTTTGG CAGTACATCA ATGGGCGTGG ATAGCGGTTT GACTCACGGG GATTTCCAAG TCTCCACCCC
GCATAATCAG TAGCGATAAT GGTACCACTA CGCCATATCC GTCATGTAGT TACCCGCACC TATCGCCAAA CTGAGTGCCC CTAAAGGTTT AGAGGTGGGG

5701 ATTGACGTCA ATGGGAGTTT GTTTTGGCAC CAAAATCAAC GGGACTTTCC AAAATGTCGT AACAACTCCG CCCCATTTGAC GCAAAATGGG GGTAGGCGTG
TAACTGCAGT TACCCTCAAA CAAAACCGTG GTTTTAGTTG CCTGAAAGG TTTTACAGCA TTGTTGAGGC GGGGTAACTG CGTTTACCCG CCATCCGCAC

5801 TACGGTGGGA GGTCTATATA AGCAGAGCTC GTTTAGTGAA CCGTCAGATC GCCTGGAGAC GCCATCCACG CTGTTTTGAC CTCCATAGAA GACACCGGA
ATGCCACCTT CCAGATATAT TCGTCTCGAG CAAATCACTT GGCAGTCTAG CGGACCTCTG CGGTAGGTGC GACAAAACCTG GAGGTATCTT CTGTGGCCCT

5901 CCGATCCAGC CTCCGCGGCC GGAACGGTG CATTTGGAACG CGGATTCCCC GTGCCAAGAG TGACGTAAGT ACCGCCTATA GAGTCTATAG GCCACCCCC
GGCTAGGTCG GAGGCGCCG CCTTTGCCAC GTAACTTGC GCCTAAGGGG CACGGTTCTC ACTGCATTCA TGGCGGATAT CTCAGATATC CGGTTGGGGG

6001 TTGGCTCGTT AGAACCGGC TACAATTAAAT ACATAACCTT ATGTATCATA CACATACGAT TTAGGTGACA CTATAGAATA ACATCCACTT TGCCTTTCTC
AACCAGCAA TCTTGCGCCG ATGTTAATTA TGTATTGGAA TACATAGTAT GTGTATGCTA AATCCACTGT GATATCTTAT TGTAGGTGAA ACGGAAAGAG
sp6 promoter

6101 TCCACAGGTG TCCACTCCA GGTCCAACTG CAGGCCATGG CGGCCATCGA TT (SEQ ID NO.25)
AGGTGTCCAC AGGTAGGGT CCAGGTTGAC GTCCGGTACC GCCGGTAGCT AA
cloning linker

Figure 5F